# MEETING SUMMARY SR 520 BRIDGE REPLACEMENT AND HOV PROJECT TECHNICAL COMMITTEE

St. Lukes Lutheran Church, Bellevue WA October 9, 2003 9:00 – 11:00 A.M.

### **Welcome and Meeting Objectives**

Maureen Sullivan, WSDOT, opened the meeting by welcoming the Technical Committee and members of the public. The objectives for the meeting were as follow: bring the committee up to speed on project status, including the alternatives to be evaluated in the environmental impact statement (EIS); provide an update on the SR-520 tolling assumptions for the EIS and current tolling study; and report on an upcoming water quality workshop and community outreach activities.

Maureen Sullivan described recent staffing changes. Les Rubstello, previous SR-520 project manager, left WSDOT for a traffic engineer position with the City of Lynnwood. Julie Meredith has replaced Les as project engineering manager. Also, Kinyan Lui has joined WSDOT as a project engineer to work on SR-520. Consultants are also back onboard since Nickel Package restored funding to the project.

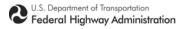
## **Project Update**

Maureen updated the committee on recent project developments. The nickel gas tax took effect on July 1, 2003. The Nickel Funding Package has allowed the project to move forward into the EIS phase. The tax allocates \$53.2 million for the SR-520 EIS, right of way (ROW) and design work. An additional \$3.5 million was set aside for a separate I-5 noise wall project that is scheduled to be complete by July 2005.

At the Executive Committee meeting held on July 15, 2003, the Committee approved revised project limits; and the three EIS alternatives, including 4 lanes (with and without expanded pontoons to allow for future high-capacity transit (HCT)), and 6 and 8 lanes with expanded pontoons to allow for future HCT. The State Legislature asked WSDOT to continue studying the 8-lane alternative, including improvements on I-5 needed to address the impacts of the 8-lane capacity. The full cost of the 8-lane alternative is not accurately reflected in current project information because the impacts at the I-5 and I-405 interchanges are currently being evaluated. The Regional Transportation Improvement District (RTID) has estimated available funding for SR-520 at approximately \$1-1.5 billion, with the rest of the cost covered by revenue from tolling. The Washington State Transportation Commission has identified a new SR-520 as suitable for tolling. Current state legislation does not allow for tolling on SR-520, because the bridge was tolled once already, so new legislation will be required.

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Julie Meredith, WSDOT, provided more detail on the project schedule and alternatives. The draft EIS is due out in mid-2005. Last month the project began looking at the impacts to I-5 with the 8-lane alternative, as SR-520 westbound traffic would be merging onto southbound I-5. Construction estimates are also being developed. The design of the preferred plan, along with ROW purchasing, permitting, and utilities, will begin July 2005. The design of the preferred plan will continue into 2008. Community outreach will continue throughout the life of the project.

The I-5 and SR-520 interchange noise wall design and construction is a separate project with separate funding and timeline. That project has begun meeting with the affected communities and is will finish construction by end of fiscal year 2005.

Julie gave an update on each of the three alternatives proposed for the SR-520 bridge replacement:

#### 4-lane Alternative

The 4-lane alternative adds a ramp from westbound SR-520 to the I-5 express lanes to the south. It would have five lanes through the Roanoke Park/Portage Bay area and no changes required on the Montlake Bridge. At the Montlake interchange, it would have 4 lanes under Montlake Boulevard, a rebuilt interchange, and inside flyer stops. There would be a pedestrian/bicycle lane from Montlake Boulevard to 96<sup>th</sup> Avenue NE and no HOV lanes. The floating bridge would be rebuilt with 4 lanes. Along the neighborhoods from Evergreen Point to Bellevue Way the westbound HOV lane would be rebuilt, shoulders would be added, and there would be an assumption of a toll plaza. There would be no change east of Bellevue Way. There is also a sub-option to the 4-lane alternative that has all the features of the 4-lane alternative, but the addition of larger pontoons to allow for future HCT.

#### 6-lane Alternative

The 6-lane alternative would add a reversible ramp from SR-520 to the I-5 express lanes to and from the south. It would have 6 to 9 lanes between Roanoke Park and Portage Bay with a lid over SR-520 at 10<sup>th</sup> Avenue East. There would be 6 lanes under Montlake Boulevard and a rebuilt interchange with a wider eastbound on-ramp and westbound offramp. A signal would be added at the westbound ramp terminal. A lid and inside flyer stops would also be constructed at the Montlake interchange. There would be a pedestrian/bicycle lane from Montlake Boulevard to 96<sup>th</sup> Avenue NE. In addition, there would be inside HOV lanes from I-5 to Bellevue Way with a re-stripe of HOV lanes to the inside from Bellevue Way to West Lake Sammamish Parkway. The floating bridge would be rebuilt with 6 lanes and would be sized to allow for future HCT. On the east shore, an eastbound HOV lane would be added and a rebuilt westbound HOV lane. Shoulders would be added along with lids at 76<sup>th</sup>, 84<sup>th</sup>, and 92<sup>nd</sup>. There would also be rebuilt flyer stops on the inside and an assumed toll plaza. There would be a rebuilt interchange at Bellevue Way.

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#### 8-lane Alternative

The 8-lane alternative would add a reversible ramp from SR-520 to the I-5 express lanes to and from the south. I-5 would also be widened as needed to accommodate SR-520 traffic. The widening of I-5 is currently being studied, and has not been included in the WSDOT Cost Estimation Validation Process (CEVP). There would be 9 lanes between Roanoke Park and Portage Bay. There would also be a lid over SR-520 at 10<sup>th</sup> Avenue East. There would be 6 lanes under Montlake Boulevard and a rebuilt interchange with a wider eastbound on-ramp and westbound off-ramp. A signal would be added at the westbound ramp terminal. A lid and inside flyer stops would also be constructed at the Montlake interchange. There would be a pedestrian/bicycle lane from Montlake Boulevard to 96<sup>th</sup> Avenue NE. There would be inside HOV lanes from I-5 to Bellevue Way with a re-stripe of HOV lanes to the inside from Bellevue Way to West Lake Sammamish Parkway. The floating bridge would be rebuilt with 8 lanes and pontoons sized to allow future HCT. On the east shore an eastbound HOV lane would be added along with a rebuilt westbound HOV lane. Shoulders would be added along with lids at 76<sup>th</sup>, 84<sup>th</sup>, and 92<sup>nd</sup>. There would also be rebuilt flyer stops on the inside and a toll plaza. The area east of Bellevue Way is being studied to identify what changes are necessary to accommodate 8 lanes of traffic. The changes necessary east of Bellevue Way have not been included in the CEVP.

## Comments/Questions

Ann Martin, King County Department of Transportation, asked if there is money for internal neighborhood traffic analysis in the Nickel Package.

Yes, there is money for traffic circulation, more detailed than a typical EIS. David Allen, City of Seattle, commented that Seattle is interested in a detailed traffic analysis for the Seattle neighborhoods impacted by the project.

Terry Marpert, City of Redmond, asked if the extension of the HOV lanes to I-5 is for all the alternatives.

All except the 4-lane alternative.

Sheldon Jahn, City of Medina, asked if all the alternatives end at Bellevue Way. No, the 8-lane alternative will need to be studied for impacts at the I-5 and to I-405 interchanges.

Ann asked if there was discussion regarding a 10-year implementation plan at the SR-520 Executive Committee meeting.

No, this takes place later.

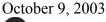
Terry asked what is the significance of the record of decision (ROD).

The ROD defines mitigation and the footprint.

Peter Beaulieu, Puget Sound Regional Council, commented that alternatives can be formulated prior to the ROD. He also suggested that the EIS state how the range of alternatives was developed and reasons why other alternatives are not included.

Ann asked how the noise walls were going to be constructed for each alternative. Noise walls would be constructed in an area where they would not be destroyed by construction of any alternative.

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**Washington State** 







David commented that the 4 and 6-lane alternatives would not affect the noise wall.

The 6-lane alternative could affect the noise wall considering the HOV component.

Sheldon commented that Medina was concerned about the alignment in the EIS. Medina would like to see the alignment moved just a little south.

Sheldon asked if the preferred approach is to keep traffic moving.

The footprint would be built to the north, but the exact alignment will be refined.

David asked what happened to the concept of a floating tunnel.

The floating tunnel was dropped because the grade out of the water would be too steep. Ann commented on the difficulty of coordinating traffic flow and funding with the other projects on I-405 and I-5.

That is one of the main reasons why the Urban Corridors Office was started. One difficulty is we do not know exactly when we will get funding. I-405 does have money for construction in the nickel package. Once construction begins you must decide when you start affecting flow. This can be helped with construction phasing. Right now we have to assume that the RTID passes next November, but there is a risk factor.

Terry commented there was no HCT lane on any of the alternatives.

The pontoons would be resized to handle the load of future HCT. HCT would most likely go down the center and lanes would be widened.

Terry suggested it be shown how HCT would look on the alternatives.

We do not want to choose a certain technology but can do that in some narrative sense. Peter asked if the deck would be able to handle HCT.

Ideally, HCT would be placed in the center to give torsional balance with new deck lanes added on the outside.

Sheldon asked what the options were for HCT.

We're not trying to determine the type of HCT. Our job is to ensure that the bridge could accommodate HCT in the future.

Peter referred to the bus tunnel, where provisions for rail were made but not fulfilled, as an example of needing to be confident that HCT can be accommodated in the future.

Ann asked if this meant the pontoons would be sized for the heaviest technology.

Bernard Van de Kamp, City of Bellevue, asked if the 8-lane would end at Bellevue Way or 108<sup>th</sup>.

We will look at Bellevue Way and how to tie into HOV lanes east of Bellevue Way. The 6 and 8-lane alternatives will look at what is absolutely necessary to make the project work all the way to I-405.

Bernard commented that 124<sup>th</sup> was important to Bellevue and asked if it would be part of the analysis.

Most likely, 124<sup>th</sup> will not be part of the 6-lane alternative. It may appear in modeling now that the project is using 2030 figures for traffic volumes.

Len Newstrum, Town of Yarrow Point, asked if the point of the study was to modify the alternatives or is it just to inform.

Regarding the 6-lane alternative we do not expect changes. Regarding the 8-lane we just do not know.

Sheldon asked if only the 6 and 8-lane alternatives propose lids.

Mitch stated that in previous designs there were lids with the 4, 6 and 8-lane alternatives.

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No, not the 4-lane alternative.

Mitch said this was incorrect and suggested the team go back and research when the 4-lane alternative included lids in its proposal.

Ann suggested that it be put in the footnotes of the brochure that costs of the 8-lane still are being studied.

Mitch suggested that in the 6-lane alternative it should state the HOV lanes are extending east from Bellevue Way.

Terry suggested the brochure should state some of the funding assumptions.

Sheldon asked what are the potential early right of way purchases.

Unsure, the only way early on would be with a willing seller and something that fits each of the alternatives.

Ann commented that the landing area on the east would have to be substantial.

Yes, but how much is not known at this time. There could be a parcel on the west that could be used for each side or for construction staging. A possible candidate for this would be MOHAI.

Sheldon commented this would be an issue brought up during community outreach. Peter asked about the status of the I-5 corridor study.

The I-5 corridor project is funded through 2 biennia for the EIS. The study will be looking at the corridor from Boeing Access in the south to Northgate in the north. It will address issues such as repaving, lane continuity, the Ship Canal, the Mercer weave, and the possibility of adding capacity.

Peter commented that the 8-lane alternative could affect the I-5 corridor study by looking at an additional lane on I-5.

Len asked about the east and west limits of the I-5 corridor study.

We do not exactly know. The goal of the project is to stay within the DOT right of way, but some want to see if there is a way to improve capacity. The goal for this group is to know how the I-5 corridor study affects the 8-lane alternative.

Ann commented that she hopes the I-5 corridor study is looking at HCT.

David asked how far south the SR-520 EIS would have to look on I-5.

We will definitely be looking to the Convention Center and beyond, but we do not know how far beyond.

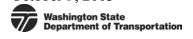
Bernard asked if the tunnel down to Fairview was still under consideration.

The findings of the 2030 traffic modeling figures showed the tunnel to be very difficult once it met the street, so other designs have taken precedence.

### **Tolling Study Update**

Brent Baker, Parsons Brinckerhoff, gave an update on the ongoing SR-520 Toll Feasibility Study. They have completed the tolled traffic and revenue projections for the 6-lane alternative, based upon an opening year of 2014. In this scenario HOV 3+ are considered toll free. Projections using the 4-lane alternative are being currently studied. In the 4-lane scenario, HOV 3+ vehicles are assumed to be tolled. They are also currently examining the revenue yields of two different bookend pricing strategies.

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There are many interrelated factors that influence travel demand, and thus, toll revenues. Economic growth, population and employment, and the future network of alternative routes and modes impact travel demand for a tolled SR-520. The toll schedule will depend on the operating policy and objectives for the facility and is influenced by value users place on their time. I either case, it is assumed that the toll rates would be adjusted by time of day to manage demand for reasonable flow conditions. Preliminary study results based on travel modeling using value of time estimates from a stated preference survey of current SR-520 users, show a lower bound toll range of \$0.00 to \$3.00 each way and an upper bound range of \$0.75 to \$4.60 each way for the six lane alternative. These one-way toll rates are based upon 2014 demand conditions in 2014 dollars.

Because tolls divert some trips from the bridge, it is useful to consider the nature of this toll diversion behavior. There are several types of toll diversion, including mode change to HOV or transit, choosing an alternate route and/or time of travel, change of trip destination, lowering trip frequency, and eliminating the trip altogether. Preliminary study results are showing a potential toll diversion between 18% and 33% of 2014 peak demand depending on toll rate assumptions and alternative. This results in a relatively minor increase in I-90 traffic during PM peak due to limited capacity on this facility. Route diversion to I-90 is much higher during off-peak times and is more sensitive to the SR-520 toll rate.

The study includes preliminary annual revenue projections for 2014. The upper bound figure is \$82 million and the lower is \$54 million. Both incorporate a 5% deduction for electronic toll collection errors and violations. Net annual revenues available for bonding need to include a deduction for maintenance and operations. Until more refined estimates are available, this is assumed to be about 20% of gross revenues, giving an upper bound estimate of \$66 million and lower bound estimate of \$43 million. The 20% figure used for deductions is only a rough estimate. The study is currently trying to identify the correct figure to use for operations and maintenance deductions.

An upcoming report in November will include an analysis of the 4-lane alternative with all HOVs paying a toll, toll collections and operations cost estimates, and a financial analysis looking at construction funding that could be supported by toll revenue bonds under various scenarios.

#### Comments/Questions

Ann asked if the tolling study would be shown with fully electronic and with manual toll collection.

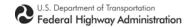
Yes, both will be shown.

David asked what future transportation improvements are assumed in the study. We are looking at the fully funded projects in the Nickel Package and some transit improvements.

David asked if there were assumptions about light rail or monorail in the study. Technical Committee Summary

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Yes, light rail, but only the central link. The monorail has not been assumed in the study. David asked what numbers are being used for the study.

We are using existing PSRC figures with new land use information.

Peter suggested there be a bullet point that states tolling will not be used to manage a lane and that managing a lane through tolling results in a different mode shift.

Len asked why the study is not looking at the 8-lane alternative.

We do not fully know the 8-lane alternative. So, it will be studied for tolling later.

Ann asked if there were a way to break apart the different types of toll diversion.

We cannot show exactly each toll diversion chosen. We know it is trip diversion, but for many cases it is with a time shift.

Len asked if there were a linear or curve line corresponding to toll diversion and toll amount.

We are trying to find a balance between a toll that provides enough revenue and creates a certain amount of toll diversion behavior.

Len commented that he believes there is a toll amount point that would be too high, so he would like to see the curve line to know what that amount is.

David asked if maximizing toll revenue and toll diversion was direction given by the legislature.

*No, the study is just looking at what is the best fit for the whole system.* 

David asked if the study would be looking at congestion pricing.

No, the study looks more at a range of prices. The lower end price should do that, but it is different from HOT lanes.

Peter commented that a managed lane study is looking at maximizing lane capacity.

This is separate and looking at revenue for the whole project.

Peter commented there needs to be a distinction between a study on managed lanes and this project.

The lower end price should be a managed lane approach and should keep traffic flowing on the bridge.

Mitch commented that there is currently a managed HOV lane on SR-520 because of the 3+ occupancy rule.

There are two ways of managing a lane price and occupancy.

Len commented that if you had a variable price you would maximize flow and revenue. *Yes, but that becomes really difficult to model.* 

Sheldon asked if the study were looking at charging different tolls depending on direction.

The model does look at directional pricing but it has found almost no difference in pricing.

Ann commented the project was not currently bonded.

Yes, but we are assuming it will be bonded. A study of financial scenarios is due out in November.

Eric asked if the 20% figure would be for entire bridge maintenance and operations. *Yes.* 

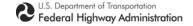
Terry asked if there were cost estimates regarding bridge maintenance and operations. *Not vet.* 

David asked if toll revenues would be put into transit service.

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We are not looking at that in this scenario. There are restrictions as to what you can do with toll revenues.

Peter asked what would happen to the toll once it was paid off. Also, can that money be used for transit.

In some places the toll remains once the project has been paid for. There are current legislative issues prohibiting that, so it would need to be a larger policy question. Peter asked if there is a fixed bond rate for the project.

We will be studying that. Current state law allows for a maximum of 25 years.

#### Other Issues

Julie informed everyone of the West End Bridge Design Workshop on October 14<sup>th</sup> at Saint Demetrios Church in the Montlake neighborhood. She also advertised the public meetings scheduled for October 29<sup>th</sup> at MOHAI in Seattle and October 30<sup>th</sup> at St. Lukes Lutheran Church in Bellevue. The public meetings will be from 4:30 p.m. to 7:30 p.m. with a presentation at 5:30 p.m.

Julie informed the group of three sunken vessels found on the west side of the lake near where the new bridge would go. The three vessels consist of two barges and one schooner. They are currently conducting surveys to uncover further details; divers will be working in the next few weeks.

Also, Julie reported that based on early action recommendations of the Trans-Lake Washington Study Committee, the Coast Guard has changed the winter Montlake Bridge closure hours. The bridge will no longer be required to open for vessels from 7:00 am to 10:00 am in the morning and 3:30 pm to 7:30 pm in the evening.

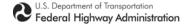
Maureen stated the project team hopes to meet again with the Technical Committee in January.

#### **Committee Members**

Present	Last	First	Organization
X	Allen	David	City of Seattle
X	Beaulieu	Peter	PSRC (alternate)
	Becklund	Kim	City of Bellevue
	Bowman	Jennifer	Federal Transit Administration
			Washington State Office of Archaeology and
	Brooks	Allyson	Historic Preservation
	Buchanan	Kurt	Department of Fish and Wildlife
X	Chipps	Eric	Sound Transit
	Conrad	Richard	City of Mercer Island
	Cushman	King	Puget Sound Regional Council

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Present	Last	First	Organization
	Dewey	Peter	University of Washington
X	Godfrey	Dave	City of Kirkland
	Grady	Mike	National Marine Fisheries Service
X	Jahn	Sheldon	City of Medina
	Kircher	Dave	
			Puget Sound Clean Air Agency
X	Leonard	Jim	Federal Highway Administration
X	Marpert	Terry	City of Redmond
X	Martin	Ann	King County Department of Transportation
X	Nelson	Kitty	National Marine Fisheries Service
X	Newstrum	Len	Town of Yarrow Point
	Pratt	Austin	U.S. Coast Guard, 13 <sup>th</sup> District
	Rave-Perkins	Krista	U.S. Environmental Protection Agency
	Stenberg	Kathryn	U.S. Army Corps of Engineers
	Swanson	Terry	Washington Department of Ecology
	Teachout	Emily	U.S. Fish and Wildlife Service
X	Van de Kamp	Bernard	City of Bellevue
X	Wasserman	Mitch	City of Clyde Hill
	Willis	Joe	Town of Hunts Point

## **Public Participants**

- Bob Tate, Clyde Hill
- Jean Amick, Laurelhurst Community Club

## **Project Team Members**

- Maureen Sullivan, WSDOT-UCO
- Julie Meredith, WSDOT-UCO
- Greg Wornell, WSDOT-UCO
- Kinyan Lui, WSDOT-UCO
- Jim Slavicek, WSDOT-UCO
- Hung Huynh, WSDOT-UCO
- Brad Phillips, Parametrix
- Michael Hornvendt, Parametrix
- Lorie Parker, CH2M Hill
- Brent Baker, Parsons Brinckerhoff
- Pat Serie, EnviroIssues
- Joy Goldberg, EnviroIssues

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Bryan Jarr, EnviroIssues

